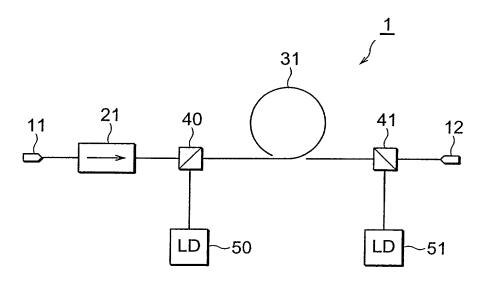
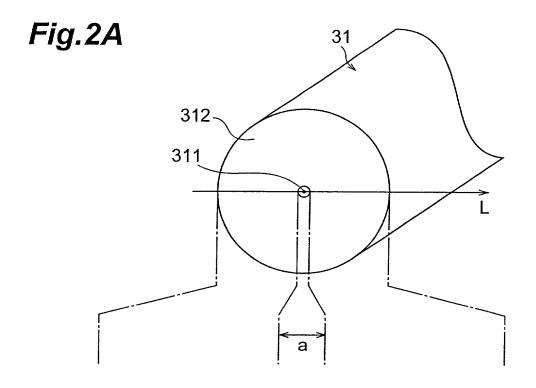
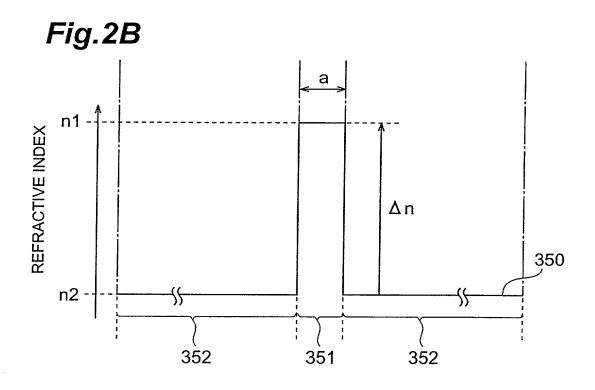
Fig.1







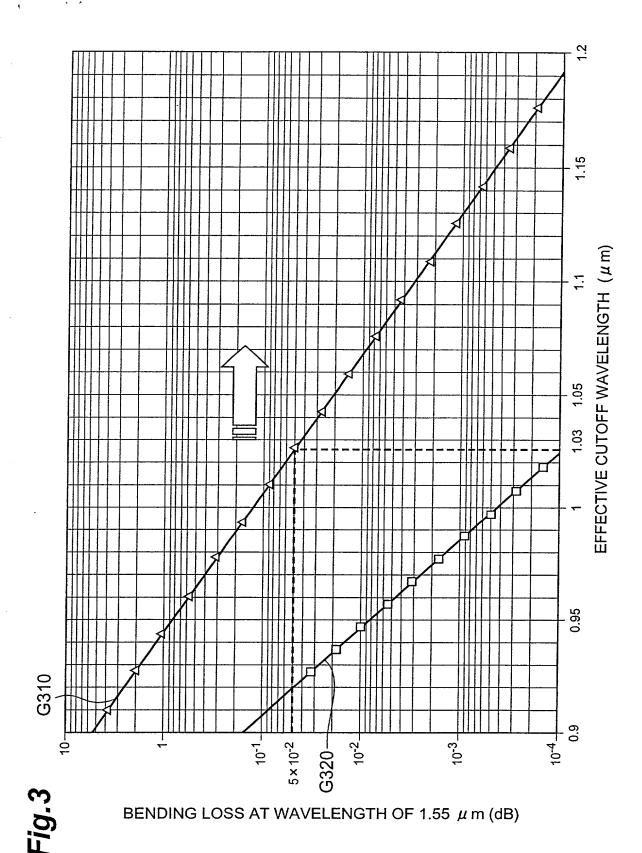


Fig.4

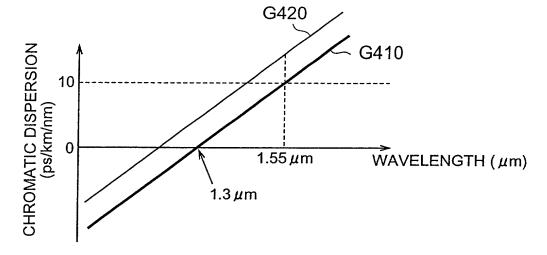
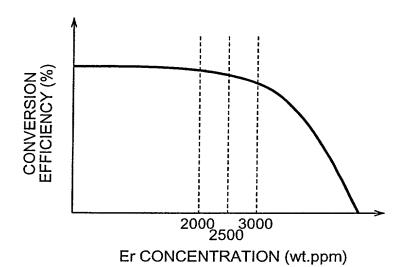
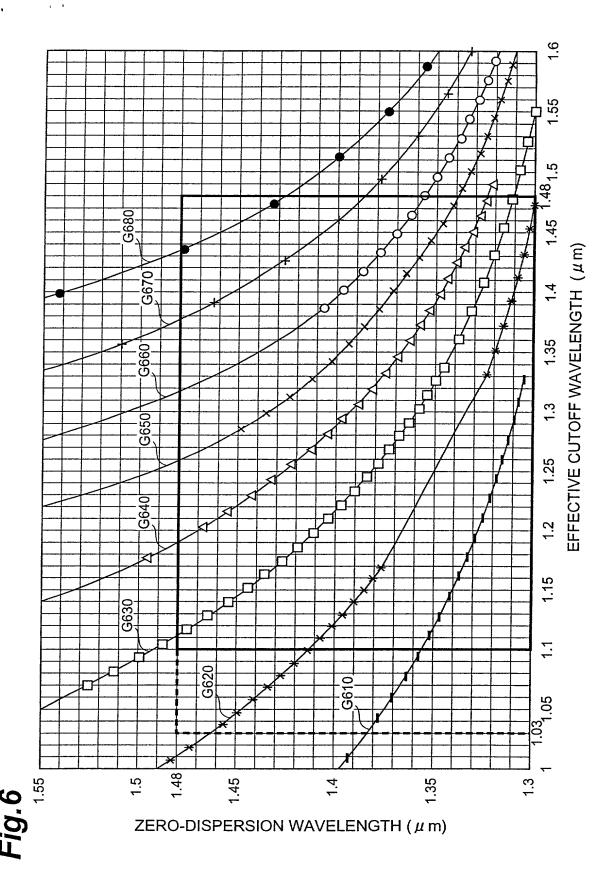
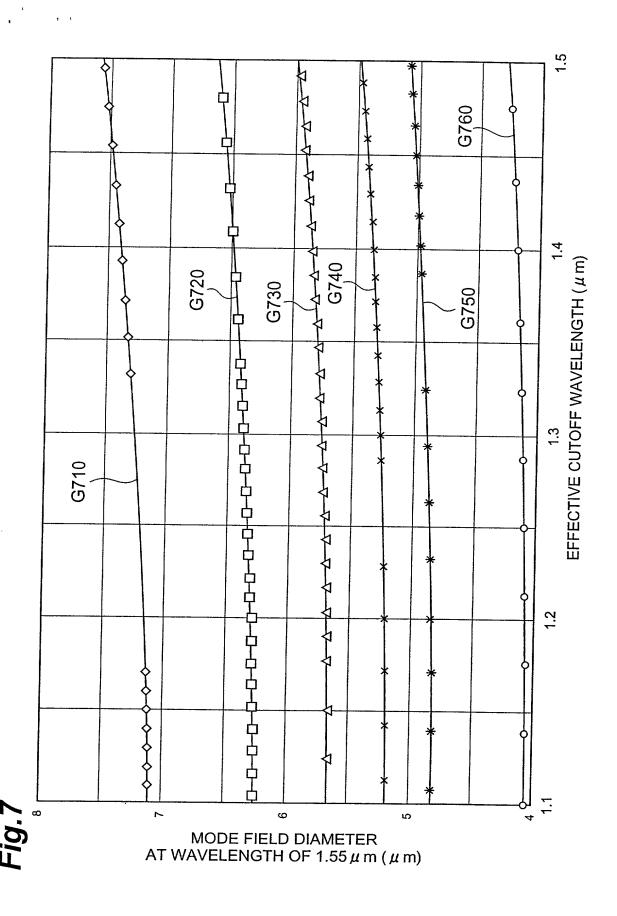


Fig.5







Fia.8

| | _ | | | _ | | | |
|---|---------------------------------|------|------|------|--|------|--|
| CONCENTRATION | Al CONCENTRATION (wt%) | | 9 | 6.2 | | 3.5 | |
| Er CONCENTRATION | Er CONCENTRATION (wt.ppm) | | | 1140 | | 062 | |
| MODE FIELD DIAMETER(μ m) | וושכטיו וה | 5.74 | 5.46 | | | 7.81 | |
| ZERO-DISPERSION MODE FIELD Er AI WAVELENGTH(µm) DIAMETER(µm) CONCENTRATION CONCENTRATION AT 1 EE (wt 25m) | | 1.38 | | 1.57 | | 1.65 | |
| EFFECTIVE CUTOFF WAVELENGTH(µm) | | 1.37 | | 1.28 | | 0.83 | |
| RELATIVE REFRACTIVE INDEX DIFFERENCE Δn (%) | | 1.12 | | 1.34 | | 0.71 | |
| | EDF1 | | | EDF2 | | EDF3 | |

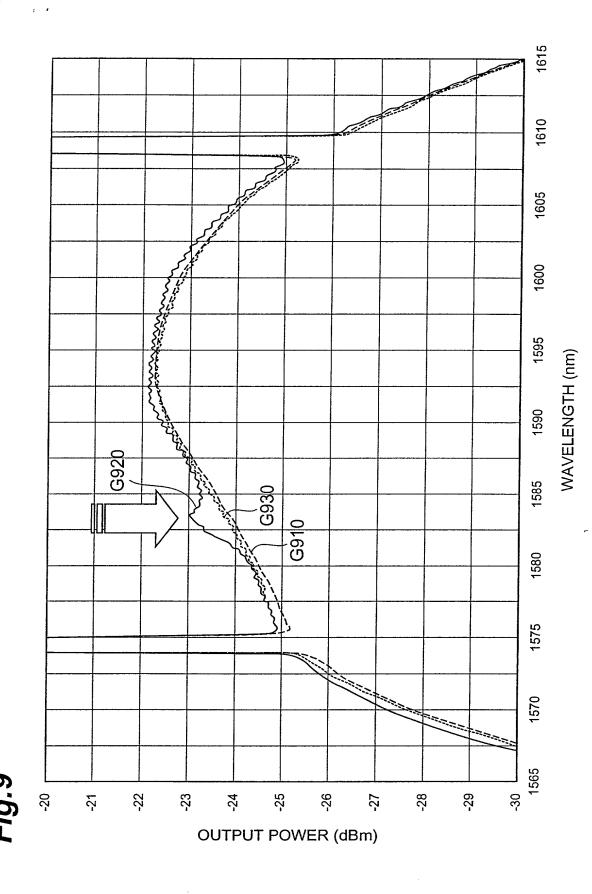


Fig.10

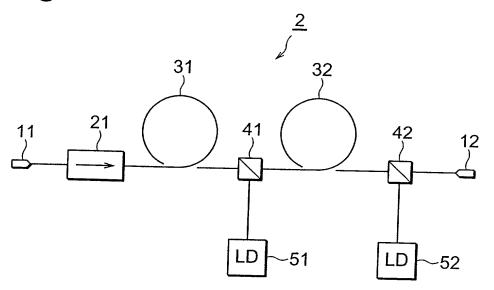
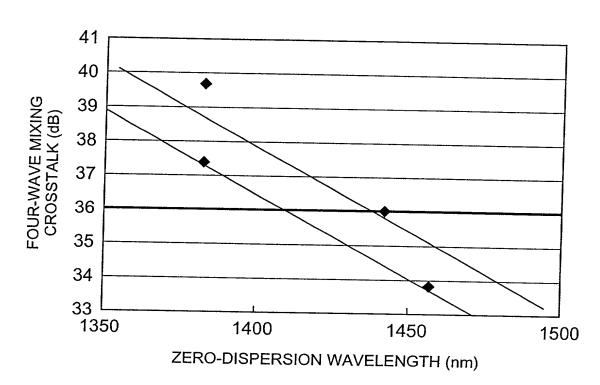


Fig.11



1605

1600

1595

1590

1585

1580

155

WAVELENGTH (nm)

G1220 Fig. 12 -40 L 5 0 ٠Ş -20 -25 -30 OUTPUT POWER (dBm)

